Amendments to the Specification:

Please amend the specification as follows:

In the paragraph beginning on line 1 of page 11, the following changes are made:

In one embodiment, the first strand includes two m5CG sequences, and the second strand includes two corresponding unmethylated CG sequences, thus forming a duplex having two hemi-methylated sites. For example, the first strand can include a 5'-m5CGN4m5CG-3' ~~(SEQ ID NO:aa)~~ sequence, where N4 is any nucleotide. In one variation of this embodiment, the first strand can include the sequence 5'-mCGTm5CG-3' ~~(SEQ ID NO:bb)~~. In another embodiment, the first strand includes two m5CN1G sequences, and the second strand includes two corresponding unmethylated CN2G sequences, also forming a duplex having two hemi-methylated sites. Alternatively, the first strand can include an m5CG sequence and an m5CN1g sequence, with the second strand including an unmethylated CG sequence and an unmethylated CN2G sequence.

In the paragraph beginning on line 3 of page 12, the following changes are made:

In one embodiment, the linker joining the first and second strands of the imprinting element is a single nucleotide, for example, a single thymine. A preferred imprinting element of this type has the sequence of 5'-CGACG-T-m5CGTm5CG-3' (SEQ ID NO: [[cc]] 1; with the linker thymine shown in bold).

In the paragraph beginning on line 26 of page 13, the following changes are made:

In an exemplary embodiment, the guiding element is a 22-nucleotide oligomer having the sequence 5'-AGCCm5CGGGm5CTGGGAGGAGTm5C GG-3' (SEQ ID NO: [[dd]] 2), which targets an Igf2 promoter. A preferred polynucleotide having a preferred imprinting element linked to this guiding element has the sequence: 5'-CGACGTm5CGTm5CGAGCCm5CGGGm5CTGGGAGGAGTm5CGG-3' (SEQ ID NO: [[zz]] 3). This polynucleotide directs methylation at a target nucleotide sequence in the Igf2 promoter.

Starting at line 10 of page 14, the table is changed as shown below:

c-myc	TCG CTA ATC TCC GCC CAC CGG (SEQ ID NO: 4)
	ACC GGC CCT TTA TAA TGC GA (SEQ ID NO: 5)
	TCC GCC CAC CGG CCC TTT AT (SEQ ID NO: 6)
HIV promoter	CAC GTA GCC CGA GAG CTG (SEQ ID NO: 7)
	CCC GAG AGC TGC ATC CGG (SEQ ID NO: 8)
	GCT GCA TAT AAG CAG CTG (SEQ ID NO: 9)
human urokinase	AGG CGC CCA CGC ATC TGG (SEQ ID NO: 10)
plasminogen	TCG CTC TTT CGC AAA ACG T (SEQ ID NO: 11)
activator receptor	ACG CAT CTG GGG CTG ACT (SEQ ID NO: 12)
(uPAR)	
human vascular	GTT ATA AAT CGC CCC CGC (SEQ ID NO: 13)
endothelial growth	GCT GGG GAA AGG TTA TAA ATC GC (SEQ ID NO: 14)
factor receptor (flt-1)	ACC CCT TGA CGT CAC CAG (SEQ ID NO: 15)
	CTT CAT CGA GGT CCG CGG (SEQ ID NO: 16)
human vascular	CCT GCA CTG AGT CCC GG (SEQ ID NO: 17)
endothelial growth	ACG GGA GAG CCC CTC CTC CGC (SEQ ID NO: 18)
factor receptor (KDR/FLK-1)	
human β3	CAC TGT GGG GCG GGC GGA (SEQ ID NO: 19)
integrin gene	TGC GTC CCA CCC ACC GCG (SEQ ID NO: 20)
human	CCG CAG ACC GGT CCT TTA A (SEQ ID NO: 21)
12-lipoxygenase	CCT GGG CGG TCC CGG GCA (SEQ ID NO: 22)
human β-amyloid	CTC CGT CAG TTT CCT CGG C (SEQ ID NO: 23)
protein precursor	ATC AGC TGA CTC GCC TGG (SEQ ID NO: 24)
(β-APP)	
human vascular	TAG CGG GGA GGA TCG CGG A (SEQ ID NO: 25)

epithelial growth factor (VEGF)	TAA AAG TCG GCT GGT AGC GG (SEQ ID NO: 26)
human insulin like growth factor-1 (IGF1)	TCT GTG CTC TAG TTT TAA (SEQ ID NO: 27) CCA GCT GTT TTC CTG TCT (SEQ ID NO: 28)
human epidermal growth factor receptor (HER2)	GCT GCT TGA GGA AGT ATA AG (SEQ ID NO: 29) AGA ATG AAG TTG TGA AGC T (SEQ ID NO: 30)
human tumor necrosis factor α (TNF-α)	TGC CGT TCC TCT ATA AAG (SEQ ID NO: 31) AGG GAC CTG AGC GTC CGG (SEQ ID NO: 32)
human tumor necrosis factor β (TNF-β)	TCG CCC CAG GGA CAT ATA AAG (SEQ ID NO: 33) CAT ATA AAG GCA GTT GTT (SEQ ID NO: 34) ACC CAG CCA GCA GAC GCT (SEQ ID NO: 35)
human interleukin 4 (IL-4)	TCG GTT TCA GCA ATT TTA (SEQ ID NO: 36) TAG AGA TAT CTT TGT CAG C (SEQ ID NO: 37)
human granulocyte-macrophage colony stimulating factor (GM-CSF)	CTC TGT GTA TTT AAG AGC T (SEQ ID NO: 38) CCG CCT CCC TGG CAT TTT G (SEQ ID NO: 39)
human interleukin 2 (IL-2)	CCA GAG AGA AGA GTA TAA T (SEQ ID NO: 40)
human bcl-2	ATA GCT GGA TTA TAA CTC (SEQ ID NO: 41) TCG TCC AAG AAT GCA AAG (SEQ ID NO: 42)
hepatitis B virus (HBV)	CAG CCA TGG AAA CGA TGT (SEQ ID NO: 43) TGA AGC GAA GTG CAC ACG G (SEQ ID NO: 44) AGA CGG TGA GAC CGC GTA (SEQ ID NO: 45)

TGC ATG GTG CTG GTG CGC A (SEQ ID NO: 46)

Cytomegalovirus (CMV)	TGG GCG GTA GGC GTG TAC GG (SEQ ID NO: 47) ACG GTA AAT GGC CCG CCT G (SEQ ID NO: 48) GCG TCA ATG GGG CGG AGT (SEQ ID NO: 49)
human c-fos	ACG CTT GTT ATA AAA GCA GT (SEQ ID NO: 50) TCG TAC TCC AAC CGC ATC TG (SEQ ID NO: 51)
human raf-1	CCG AGA GTC TTA ATC GCG G (SEQ ID NO: 52) TCG CGC AGA ATC GGA GGC (SEQ ID NO: 53)

In the paragraph beginning at line 19, page 25, please make the following changes:

An oligonucleotide having the sequence: 5' CGACGTm5CGTm5CGAGCCm5CGGGm5CTGGGAGGAGTm5CGG-3' ("HepKex;" SEQ ID NO: [[zz]] 3) was designed to target the most proximal promoter of Igf2 (human hP4 and mouse mP3). This oligonucleotide and a control oligonucleotide ("CTII001") having the sequence: 5'-GGTCACGGTCAGGCGTAGATGG-3' (SEQ ID NO: [[xx]] 54) were synthesized as phosphorothionate deoxyoligonucleotides using standard automated phosphoramidite chemistry and were purified by HPLC. (The CTII001 control oligonucleotide had the same nucleotide content as HepKex, but with a randomized sequence.)

In the paragraph beginning at line 27 on page 25, make the following changes:

More specifically, HepKex was synthesized using phosphorothionate deoxynucleotide precursors, except that a methylated cytidine precursor (5mdC) was used to introduce methylated cytidines at desired positions in the oligonucleotide, HepKex was synthesized as a single stranded oligonucleotide and, after HPLC, was dissolved in aqueous solution. In this solution, the imprinting element portion of HepKex

(residues 1-11 of SEQ ID NO: 3) ~~(5' CGACG T m5CGTm5CG 3 SEQ ID NO: ??)~~ self anneals to form a hairpin structure.